

Using resources wisely in the COVID-19 pandemic: an international list of Choosing Wisely recommendations

Karen Born¹ 

Wendy Levinson² 

Luis Claudio Correia³ 

Sandra Verner⁴ 

¹Corresponding author. Institute of Health Policy, Management & Evaluation, University of Toronto (Toronto); Choosing Wisely Canada (Toronto). Ontario, Canada. karen.born@utoronto.ca

²University of Toronto (Toronto). Choosing Wisely Canada (Toronto). Ontario, Canada. wendy.levinson@utoronto.ca

³Escola Bahiana de Medicina e Saúde Pública (Salvador). Bahia, Brazil. luis.correia@bahiana.edu.br

⁴Slow Medicine Italy (Torino); Choosing Wisely Italy (Torino). Italy. s.vernero@slowmedicine.it

ABSTRACT | BACKGROUND: The novel coronavirus (COVID-19) pandemic has brought forth issues of health system resource limitations into urgent matters of public importance. Our objective was to rapidly develop an international Choosing Wisely list of recommendations for clinicians and the public about using resources wisely in the COVID-19 pandemic. **METHODS:** Choosing Wisely Canada convened a rapid Delphi process to develop an international Choosing Wisely list for COVID-19. Informed by a rapid review of emerging literature, this process engaged a small group of clinicians and public advisors in Canada (n=10) and internationally (n=8) to develop a candidate list of recommendations. A survey with candidate recommendations was sent to Choosing Wisely clinician leaders in Canada and around the world. Based on survey results and input, list recommendations were modified. **RESULTS:** The survey was sent to 293 potential respondents and received a 56% response rate in 72 hours (n=163). Respondents were asked to score each of the 9 recommendations on a 5-point Likert scale ranging from 1 strongly disagree to 5 strongly agree followed by free text comment. There were 271 total comments across 9 recommendations. Overall, all 9 recommendations had high levels of agreement with 83%-96% of respondents ranking them as strongly agree or agree. **INTERPRETATION:** This list of recommendations provides evidence-based statements about using resources wisely in the COVID-19 pandemic. The list reflects international consensus on evidence-based recommendations for both clinicians and the public which were achieved through a rapid consensus building process. **TRIAL REGISTRATION:** n/a

KEYWORDS: Choosing Wisely. COVID-19.

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Introduction: Using Resources Wisely in the COVID-19 Pandemic

Health care systems globally are straining to meet the surge of needs from the novel coronavirus (COVID-19) and are grappling with managing demands for limited health care resources. The rapid spread and divergent public health strategies, management of system resources and outcome trajectories of countries offer unique insights into resource stewardship approaches in the context of a pandemic.

Choosing Wisely is a global movement comprised of national, physician-led campaigns dedicated to raising awareness about unnecessary tests and treatments in health care. First launched in the United States in 2012, campaigns develop evidence-based lists of tests or treatments that clinicians and patients should question¹. Wise use of finite health care resources is core to Choosing Wisely campaigns. At present 25 national physician associations and groups have launched or have planned Choosing Wisely campaigns in five continents, including Australia, New Zealand, Japan, South Korea, many European countries, India, Israel, South Africa and Brazil. Choosing Wisely Canada leads an international network of campaigns.

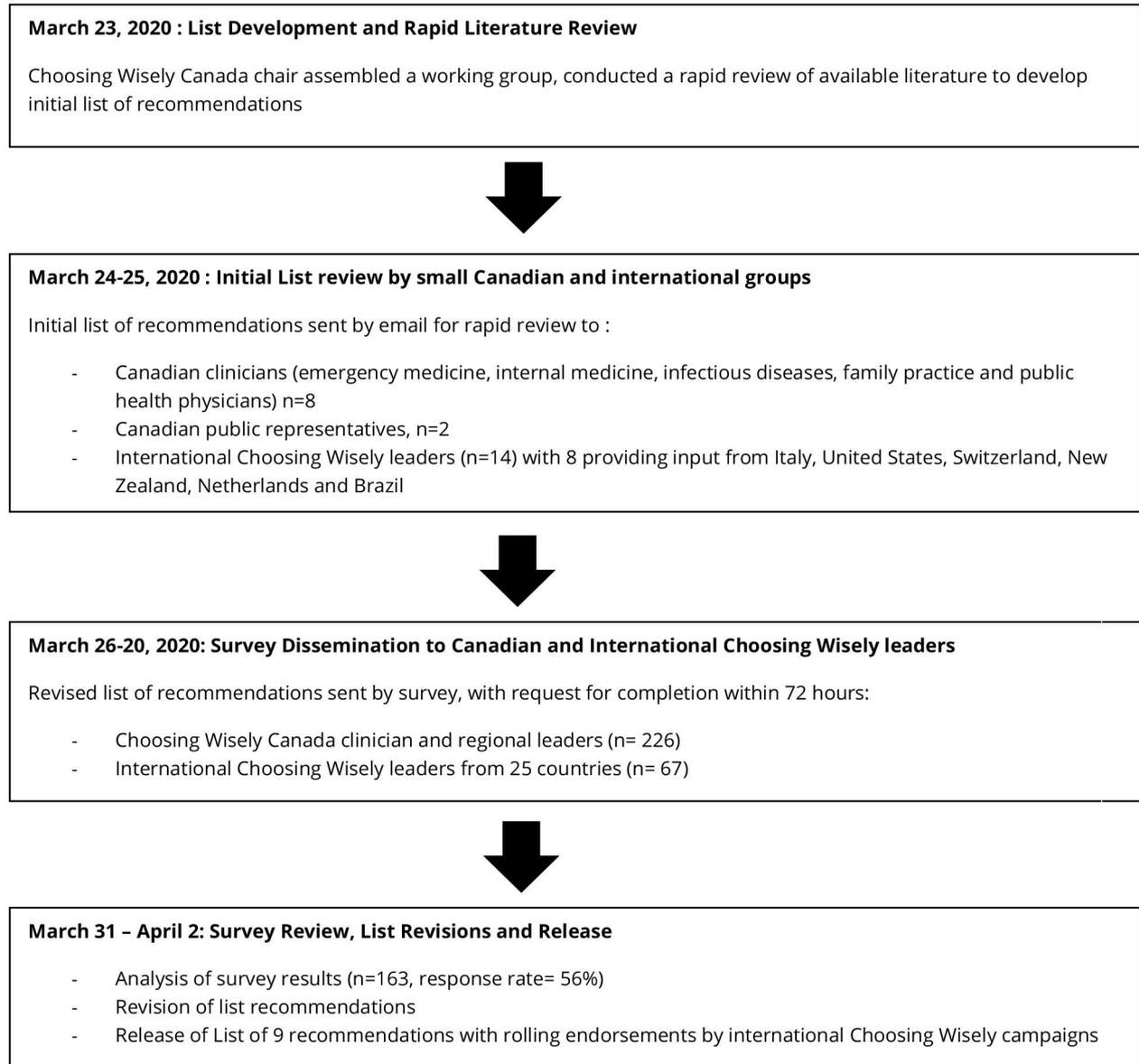
On March 11, COVID-19 was upgraded by the World Health Organization (WHO) from a public health emergency of international concern to a pandemic². On March 23, Choosing Wisely Canada initiated a rapid modified Delphi process to develop a list of recommendations on using health care resources wisely during the COVID-19 pandemic³. The recommendations collate collective experiences and insights from front line clinicians and Choosing Wisely leaders from the around the world and was released on April 2, 2020. A working group comprised of Canadian and international clinicians and patients has been convened to review the list of recommendations on a monthly basis considering changing practices and emerging evidence related to COVID-19.

Methods—List Development

Choosing Wisely Canada undertook a rapid review of the available literature to inform an initial list of recommendations with a focus on resource stewardship specific to COVID-19. Given the massive impact of COVID-19 on public life, and emphasis on strategies to reduce transmission through personal distancing, the initial list included 5 respective recommendations for the public and clinicians. Each recommendation was worded in the typical format for Choosing Wisely which begins with a don't statement, followed by a rationale and references.

The draft list of 10 recommendations was simultaneously sent by email with a request for rapid feedback to Choosing Wisely Canada clinician leaders (n=8) and patients (n=2), along with Choosing Wisely international clinician and campaign leaders (n=14). Canadian clinicians were selected based on the relevance of their specialty to various dimensions of COVID-19 management and included physicians with specialties in emergency medicine, internal medicine, infectious diseases, family medicine and public health. International leaders were selected based on their clinical experience as well as COVID-19 experience and respondents included physicians from Italy, United States, Switzerland, New Zealand, Netherlands and Brazil. Suggestions and input were received within a 24-hour period from all 10 Canadians, and 8 international campaign leaders. List recommendations were revised and on was removed based one feedback. On March 26, a survey to rank and comment on 9 list recommendations was sent to Canadian Choosing Wisely campaign leaders (n=226) and international Choosing Wisely leaders (n=67) with a request for response within 72 hours. Canadians sent the survey were representatives from national medical specialty societies, and societies representing other clinicians such as nurses and pharmacists, along with leaders from physician associations and regional campaigns in all 13 Canadian provinces and territories. Survey responses and feedback were incorporated into the list, which was released on April 2, 2020. Figure 1 provides an overview of the Choosing Wisely COVID-19 list development process.

Figure 1. Overview of Choosing Wisely COVID-19 List Development Process



Results – Choosing Wisely COVID-19 List

Feedback from the small group of Canadian (n=10) and international Choosing Wisely leaders (n=8) led to revisions to the initial list of recommendations as well as list rationales. One of the recommendations against the use of face masks for the public was removed. This was based on feedback from Italian clinicians noting changing public health advice and practices given broader COVID-19 spread in Italy, and subsequent public advisories to wear masks to reduce transmission of the virus⁴.

The revised list of 9 recommendations were distributed by survey to 293 potential respondents. The survey response rate in 72 hours was 56% (n=163). Respondents were asked to score each of the 9 recommendations on a 5-point Likert scale ranging from 1 strongly disagree to 5 strongly agree. Following each recommendation, a comment box was provided for free text comments, suggestions and revisions related to each recommendation.

Chart 1 shows the responses, including the number of comments per recommendation. Overall, each of the recommendations had high levels of agreement with 83%-96% of recommendations receiving strongly agree or agree.

Comments and suggestions included minor suggestions for wording but also more substantive suggestions. For example for recommendation 2 was substantially revised as the initial wording was “Don’t go to a hospital, clinic or your health care provider for routine care (preventive visits, routine blood work) or non-urgent care during the COVID-19 outbreak”.

Multiple respondents suggested that the language of “non-urgent care” was vague and unclear to a public audience. The recommendation was changed based on this to “...or non-essential without calling ahead”. Further, the rationale included that some care should not be delayed and individuals should speak to their health care provider. For the public list of recommendations, references included lay friendly sources of evidence-based information. For the clinician list of recommendations, references are to the peer-reviewed literature.

Given the rapid speed at which information and evidence related to COVID-19 is being released, a working group comprised of the small group of Canadian and international Choosing Wisely leaders will review the list items on a monthly basis considering evidence-based literature and practices. Given that the list was developed in collaboration with international Choosing Wisely campaigns, it is being endorsed on a rolling basis by countries. As of April 6, 2020 the list has been endorsed by Choosing Wisely campaigns in Australia, Brazil, Denmark, France, Italy, Switzerland, Japan and United Kingdom. The list is being translated and adapted to different countries by adding country-specific references to relevant COVID-19 information from national agencies and authorities. The COVID-19 list of recommendations released on April 2, 2020 is in Chart 1. The full list of recommendations, along with rationale and references is on the Choosing Wisely Canada website⁵.

Chart 1. Choosing Wisely COVID-19 Final List of Recommendations and survey responses

Final recommendation, recommendations 1-4 for public audience, 5-9 for clinicians	Degree of Agreement, Number of respondents (%)					Number of comments, Sample comment
	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree	
1 Don't go out for non-essential reasons. Keep a safe physical distance from others (2 m or 6 ft.) and follow guidance from your national and local public health authority.	0	0	3 (1.8)	18 (11)	142 (87.1)	48 "This is important also for preserving capacity for all the non- COVID care that must still be provided"
2. Don't go in person to a hospital, clinic, or health care provider for routine care (preventative visits, routine blood work) or non-essential care without calling ahead.	2 (2.5)	4 (2.5)	14 (8.6)	29 (17.8)	112 (68.7)	47 "Message should not be just not to go - it should be to call instead."
3. Don't go to the emergency department for assessment of mild COVID-19 symptoms. Use virtual tools or screening centres if available.	0	2 (1.2)	7 (4.3)	22 (13.5)	132 (81)	31 "Mild COVID-19 symptoms are indistinguishable from common cold. We should encourage people to contact screening centers."
4 Don't self-prescribe or request unproven therapies to prevent or treat COVID-19.	0	3 (1.8)	9 (5.5)	15 (9.2)	136 (83.4)	31 "Potential harms should be emphasized."
5. Don't offer non-essential services to patients in person, if virtual tools such as telephone or online visits are available. Delay non-essential care and laboratory testing when possible.	0	0	12 (7.4)	31 (19)	120 (73.6)	22 "I worry that some important things may get missed."
6. Don't send frail residents of a nursing home to the hospital, unless their urgent comfort and medical needs cannot be met on site.	0	0	11 (6.7)	36 (22.1)	116 (71.2)	28 "the problem of overwhelmed acute care hospitals should be included in the statement."
7. Don't give red blood cells (RBC) based solely on an arbitrary hemoglobin level. Give one- unit of RBC at a time and reassess the need for more.	1 (0.6)	5 (3.1)	21 (12.9)	20 (12.3)	116 (71.2)	25 "make a direct linkage to Covid19"
8. Don't intubate frail elderly patients in the absence of a discussion with family members regarding the patient's advanced directives whenever possible.	1 (0.6)	2 (1.2)	24 (14.7)	23 (14.1)	113 (69.3)	41 "Often there is no time to have such discussions"
9. Don't prescribe unproven therapies for COVID-19 patients other than in an approved clinical trial.	3 (1.8)	2 (1.2)	17 (10.4)	24 (14.7)	117 (71.8)	29 "off label use produces a lot of dangerous side effects and victims"

Limitations

There was a compromise between the rapid Delphi process and involvement of all relevant countries, clinicians and leaders. The survey sent to 298 Canadian and international respondents was anonymous to ensure that respondents would feel comfortable to rank recommendations critically and offer frank suggestions and comments. As such, it is not possible to provide demographic or other information (region, country, clinical specialty, member of the public) of survey respondents, or link these to specific feedback or comments on the survey.

Discussion

This international list of recommendations provides brief, evidence-based statements about resource stewardship and are based on a rapid consensus process to engage clinician leaders from around the world. This rapid Choosing Wisely list development is demonstrative of rapid, cross-country learning and collaboration taking place due to the urgency of the COVID-19 pandemic.

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Competing interests

The authors are involved as leaders in Choosing Wisely campaigns in Canada, Brazil and Italy. No other financial, legal or political competing interests with third parties (government, commercial, private foundation, etc.) were disclosed for any aspect of the submitted work (including but not limited to grants, data monitoring board, study design, manuscript preparation, statistical analysis, etc.).

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